

CLAIMS

1. A porous fire resistant sheet characterized by a synthetic resin film covering fire retardant capsules, causing said fire retardant capsules to adhere to porous material.
2. A porous fire resistant sheet in accordance with Claim 1, wherein said fire retardant capsules are added to said porous material in an amount of between 5% and 80% by mass.
3. A porous fire resistant sheet in accordance with Claim 1, wherein said fire retardant is water soluble and said synthetic resin film is water insoluble.
4. A porous fire resistant sheet in accordance with Claim 1, wherein said porous material is fiber.
5. A porous fire resistant sheet in accordance with any of Claims 1 to 4, wherein said fibers are all hollowed, or a mixture of solid and hollowed fibers.
6. A porous fire resistant sheet in accordance with any of Claims 1 to 5, wherein an additional fiber having a low melting point of below 180°C are mixed in with said fiber.
7. A porous fire resistant sheet in accordance with any of Claims 1 to 6, wherein synthetic resin binder is contained in said fiber in an amount of between 5 and 200 % by mass for fibers.
8. A porous fire resistant sheet in accordance with Claim 7, wherein said synthetic resin binder is water solution.
9. A porous fire resistant sheet in accordance with Claim 8, wherein water soluble resin is dissolved in said water solution.
10. A porous fire resistant sheet in accordance with Claims 9 or 10, wherein said synthetic resin binder is a phenolic resin, and said phenolic resin is sulfomethylated and/or sulfimethylated.
11. A porous fire resistant sheet in accordance with Claim 1, wherein said porous material is an expanded synthetic resin
12. A porous fire resistant sheet in accordance with Claim 11, wherein synthetic resin binder is contained in said expanded synthetic resin in an amount of between 5 and 200% by mass for said expanded synthetic resin.

13. A porous fire resistant sheet in accordance with Claim 12, wherein said synthetic resin binder is a water solution.
14. A porous fire resistant sheet in accordance with Claim 13, wherein water soluble synthetic resin is dissolved in said water solution.
15. A porous fire resistant sheet in accordance with Claim 12 or 13, wherein said synthetic binder is a phenolic resin and said phenolic resin is sulfomethylated and /or sulfimethylated.
16. A molded article wherein said porous fire resistant sheet, in accordance with any of Claims 1 to 15, is molded into a prescribed shape.
17. A molded article in accordance with Claim 16, wherein a ventilation resistance of said molded article is in the range of between 0.1 and 100kPa·s/m.
18. A laminated material wherein other porous sheet(s) is (are) laminated onto one or both sides of said porous fire resistant sheet in accordance with any of Claims 1 to 15.
19. A laminated material in accordance with Claim 18, wherein other porous sheet(s) is (are) laminated onto one or both sides of said porous fire resistant sheet(s) through thermoplastic resin film(s) having a thickness of between 10 and 200 μ m.
20. A laminated material in accordance with Claim 19, wherein a hot melt adhesive powder is scattered onto one or both sides of said porous fire resistant sheet in an amount of between 1 and 100g/m², and said other porous material sheet(s) is (are) laminated onto said porous sheet through said scattered layer of hot melt adhesive powder.
21. A molded article wherein a laminated material in accordance with Claim 18 or 19 is molded into a prescribed shape.
22. A molded article in accordance with Claim 21, wherein a ventilation resistance of said molded article is in the range of between 0.1 and 100 kPa·s/m.
23. A fire resistant acoustic material for cars made of a molded article in accordance with any of Claims 16, 17, 21 and 22.